

**Measures****Pavement Condition**[Interstate](#)[Primary](#)[Secondary](#)**Bridge Condition****Transit Vehicle Age****Performance Summary****Print Section****Goal: Maintenance and Preservation**

Preserve and maintain the condition of the existing transportation system.

**Grade = D**

The Commonwealth has made an enormous investment in an extensive transportation system and it would not be prudent to allow these assets to deteriorate. Timely maintenance of the facilities results in reduced lifecycle costs. Assuring system preservation also addresses other goals of the transportation system. For example, poor pavement condition can reduce travel speeds thus negatively affecting mobility. Poor infrastructure conditions can also require repairs that may result in road closings and detours. Additionally, safety can be endangered by poor system condition.

**Performance Measures**

- Percentage of Interstate Roads in Fair or Better Condition
- Percentage of Primary Roads in Fair or Better Condition
- Percentage of Secondary Roads in Fair or Better Condition
- Percentage of Bridges in Fair or Better Condition
- Transit Vehicle Age

**Performance Highlights**

- Interstate (79.5%) and Primary (75.6%) roadway pavement condition both fell short of the target of 82% in fair or better condition
- Secondary roadway pavement condition worsened from 2007 (75.8%) to 2008 (71.3%)
- Bridge condition (91.6%) is just below the target of 92% in fair or better condition
- The average transit vehicle age in Virginia is lower than the national average

**Strategies**

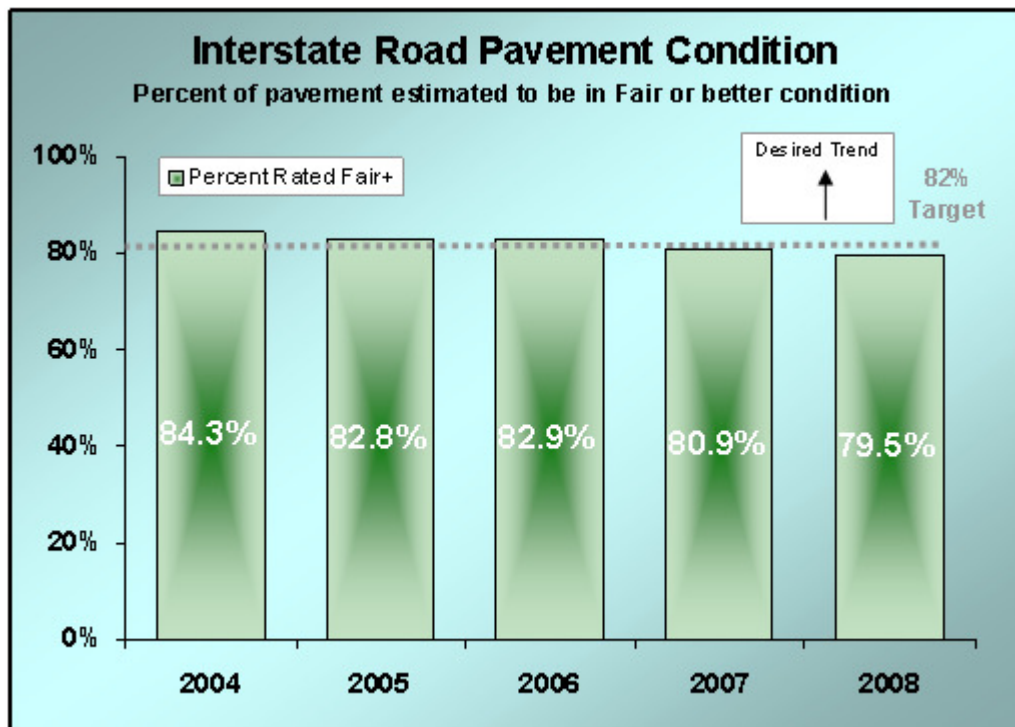
- Implement a pavement management system capable of generating recommendations for the most economical set of activities to preserve and extend pavement life
- Ensure recommendations from the pavement management system and bridge management system are implemented using available funds
- Make use of both maintenance and construction funds to repair, rehabilitate and, when appropriate, reconstruct pavements and bridges

**Percentage of Interstate and Primary Road Pavement in Fair or Better Condition**

Pavement condition is measured using the Critical Condition Index (CCI). This index describes pavement condition in terms of whether there are cracks, bumps and ruts. The index ranges from "0" for very poor to "100" for pavement in excellent condition.

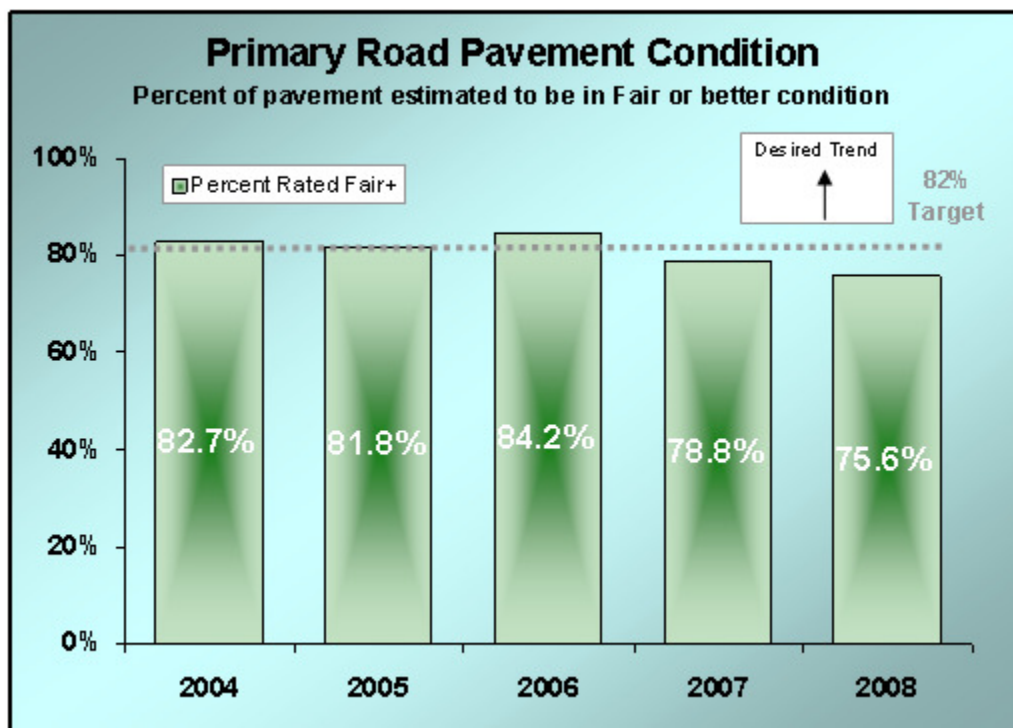
VDOT has set a goal of 82% of interstate system pavements to be in fair or better condition, and 100% of these

roadways are surveyed each year. The 82% goal was met for the interstate system until 2007. Fewer than 80% of interstate pavements were rated fair or better in 2008.



Source: Department of Transportation Maintenance Division

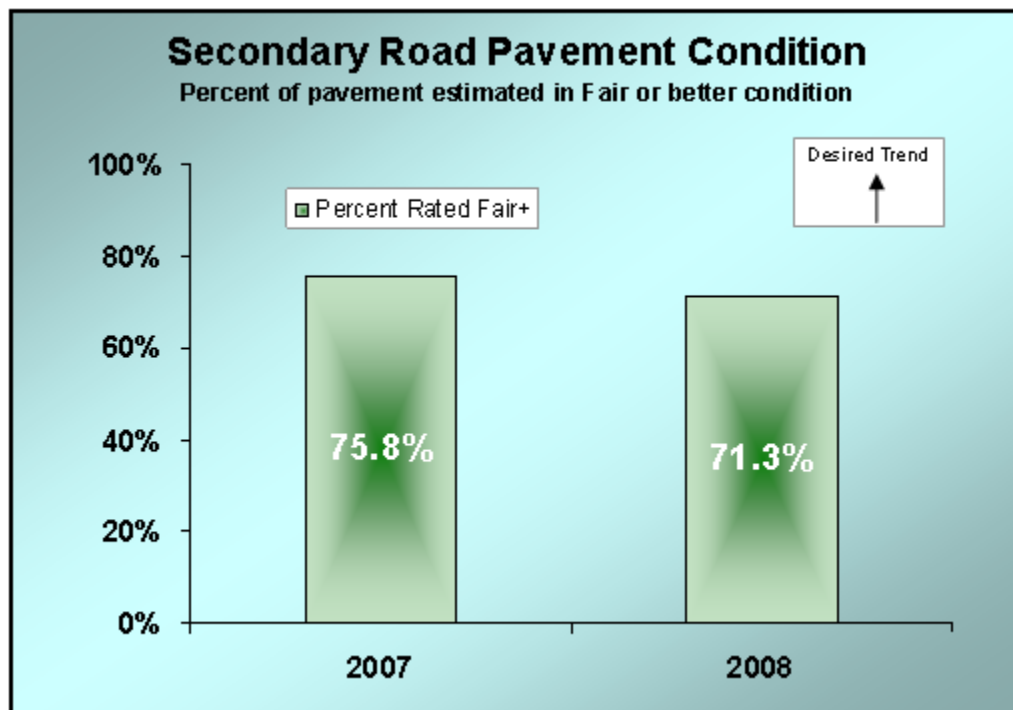
Like the interstate system, the established goal for the primary system is also 82% in fair or better condition and 100% of these roadways are surveyed each year. In 2008, only about 76% of primary roads were rated fair or better, below the 82% goal.



Source: Department of Transportation Maintenance Division

#### Percentage of Secondary Road Pavement in Fair or Better Condition

A representative sample of 20% of secondary roadways is surveyed each year. The 2008 sampling indicated that 71% of statewide secondary pavement was estimated to be in fair or better condition:

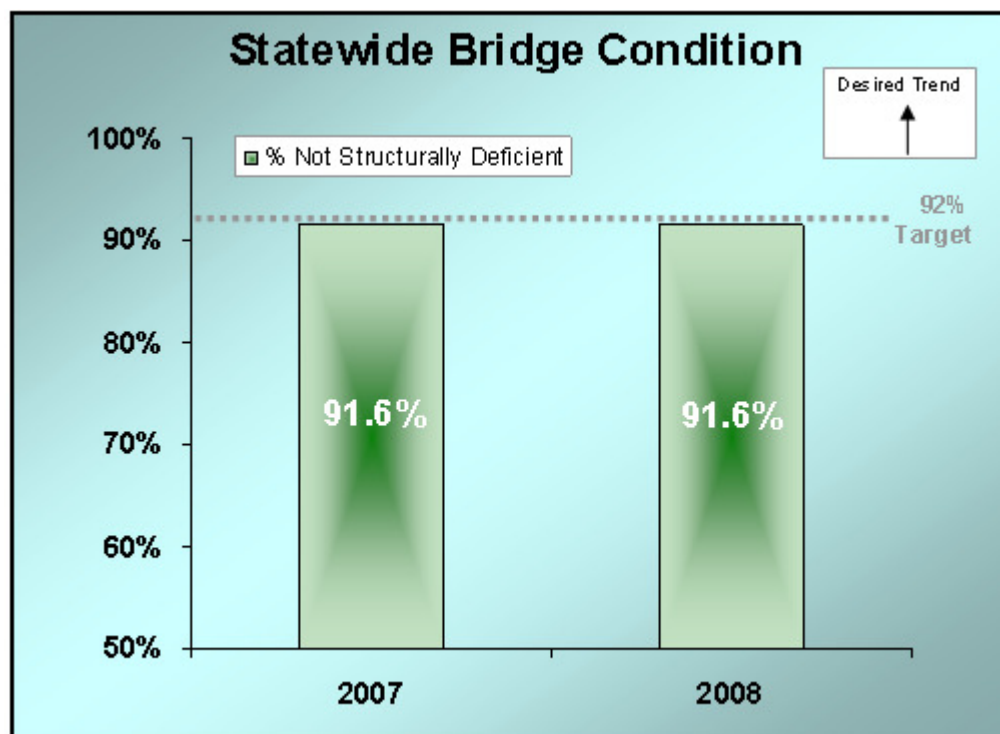


Source: Department of Transportation, State of the Pavement Report (2008)

#### Percentage of Bridges in Fair or Better Condition

Virginia uses the National Bridge Inventory General Condition Rating (GCR) criteria to identify bridges in need of repair or rehabilitation. The GCR is a numerical scale that ranges from "0" for failed condition to "9" for excellent condition. A structure receiving a GCR of less than six will require more than regular maintenance, and that number has been relatively stable over several years.

Virginia also addresses the structural integrity of bridges using the National Bridge Inspection Standards. These also use a "0" to "9" scale (nine being the best) and any structure receiving a rating of four or less is identified as structurally deficient. A bridge may also be considered structurally deficient if it has been restricted to light vehicles, closed to traffic or requires rehabilitation. In 2008, 91.6% of Virginia's 20,837 bridges were rated fair or better (not structurally deficient) and that number has been stable the last few years.



Source: Department of Transportation, Dashboard

The fact that a bridge is rated structurally deficient does not imply that it is likely to collapse or that it is unsafe. It means that it must be monitored and inspected more often and may require additional maintenance.

### Transit Vehicle Age

The Federal Transit Administration provides guidelines regarding transit vehicle replacement (12 years for vehicles and 25 years for locomotives). Virginia encourages transit operators to follow a rehabilitation program that extends the useful life of the vehicles beyond industry standards and to apply for new vehicles in advance of the deterioration of current assets.

In 2008, the average age of vehicles in Virginia's transit fleets improved to 6.7 years, down from 7.4 years in 2006, a 9% decrease. This average vehicle age is lower than a recently published national average of 9.4 years, indicating that Virginia's transit vehicles are newer, on average, than the industry standard.

### Performance Summary

**Grade = D**

Performance Measure	Desired Trend	Performance Trend
Interstate Road Pavement Condition	↑	↓
Primary Road Pavement Condition	↑	↓
Secondary Road Pavement Condition	↑	↓
Bridge Condition	↑	→
Transit Vehicle Age	↓	↓